

AMENDMENT UNDER 37 C.F.R. § 1.111

U.S. Appln. No. 09/556,517

Attorney Docket No. Q58755

REMARKS

General remarks.

Claims 16-23, 25-27, and 86-97 are all the claims now pending in the application. The original independent claims have all been amended to require that the network address include an IP address. Dependent claim 19 has been amended to conform to the terminology now used in independent claim 16.

Applicant respectfully thanks the Examiner for acknowledging Applicant's claim to foreign priority and the IDS filed on April 21, 2000.

However, the Examiner indicated that none of the certified copies of the priority documents had been received. The transmittal letter that accompanied this application upon its original filing indicated that the priority documents were filed in the parent application No. 09/121,860. Applicant therefore respectfully requests the Examiner to investigate whether he can properly indicate that the certified copies of the priority documents have been received in Applicant no 09/121,860, or whether the indication as currently made is accurate.

Overview of the prior art rejections.

This table summarizes the prior art rejections, all of which are under 35 U.S.C. § 103(a) unless otherwise indicated.

	Hsieh	Allard	Benash	Shaw
16, 20, 25	x (§102)			
17	x	x		
18	x	x		x
19	x		x	
21, 22, 26	x	x		x
23, 27	x			x

Discussion of the art rejections.

Claims 16, 20, and 25.

The Examiner rejected claims 16, 20, and 25 under 35 USC § 102(e) as being anticipated by Hsieh. The three rejected claims are all independent claims, but include substantially similar requirements and thus may be discussed together using claim 16, as now amended, as being representative of all three.

Claim 16, as now amended, requires:

network communications means which can connect to a communications network and has a plurality of IP addresses representing a plurality of locations on the network and which responds to a communications message addressed to any of the plurality of IP addresses;

For linguistic convenience only, the above-identified limitation will sometimes be referred to as the "plural IP address" requirement.

In Hsieh, there is a router that serves several different host computers. The originator of a fax message indicates, through a voice response system, the identity number for the recipient of the fax. The router is responsive to this identity indication to route the fax message to the appropriate host computer. That is to say, each computer is addressed by the outside world using an address that is the central telephone number plus a recipient identification code. The fax routing device in Hsieh does not have plural IP addresses.

Because of this deficiency of Hsieh, it is clear that Hsieh does not anticipate claim 16, as now amended, within the meaning of 35 U.S.C. § 102. Applicant therefore respectfully requests the Examiner to withdraw this rejection of independent claim 16, and also this rejection of independent claims 20 and 25, in view of their similar requirements in this regard.

Claim 17.

The Examiner rejected dependent claim 17 under 35 U.S.C. § 103(a) as being unpatentable Hsieh in view of Allard. Applicant respectfully traverses this rejection, in view of its dependence upon claim 16.

As demonstrated above, Hsieh lacks the plural IP address requirement of claim 16. Allard does not compensate for this deficiency of Hsieh, as will now be demonstrated.

Allard stands for the proposition that, in a system where network naming is used, network addresses can be determined even though different naming conventions might be used. Allard does not at all teach or suggest anything concerning devices that are not able to communicate on a network in the first place. Allard deals only with naming:

In some instances a first node in a network is prevented from obtaining a network address corresponding to a second node attached to the network because the naming protocols used by the first and second nodes are incompatible. This is particularly frustrating for a user when the end systems (nodes) are running compatible network transports enabling the nodes to connect based upon an address, but are prevented from doing so because the user only knows the name of the node with which a connection is desired.

That is to say, Allard teaches us nothing about what to do when the different nodes in a network are not running compatible network transports. Allard relates to only the situation in which the address is unknown, but the name is known.

Even taken together, with Hsieh, as a whole for what they would have meant to an artisan of ordinary skill, the combined teachings of Hsieh and Allard would not have led such a person to have achieved the subject matter of claim 16, let alone its dependent claim 17.

It is completely unclear, furthermore, how the teachings of Allard could be combined with Hsieh. How could the "naming" solution of Allard be combined with the fax server of Hsieh? Hsieh does not appear even to use naming at all. Allard does not appear to be relevant in the context of Hsieh. In Allard, there is concern because naming conventions might differ over

networks, but what can that mean in the context of the Hsieh fax server, where only one network is used?

The impracticality of combining Hsieh and Allard at all begs the final question: "What in Allard would have motivated the artisan of ordinary skill to have changed Hsieh to have included in the fax server some modifications equivalent to the plural IP address requirement?" Applicant respectfully submits that no such motivation or teaching can be found in Hsieh, in Allard, or in their combined teachings taken as a whole.

In applying Allard, the Examiner has apparently been broadly interpreting "network incompatible". Claim 17 has herein been amended in a way that is respectfully submitted to prevent such a broad interpretation.

For all of these reasons, Applicant respectfully requests the Examiner to withdraw this rejection of claim 17.

Claim 19.

The Examiner rejected claim 19 (i.e., 19/16-18) as being unpatentable Hsieh in view of Benash.

As already mentioned, independent claim 16 patentably distinguishes over Hsieh in view of the plural IP address requirement in claim 16.

The Examiner relied on Benash for its teaching regarding a TCP/IP network.

The Benash Patent has an excellent background section that describes TCP/IP messaging. The inventive part of Benash relates to a system that a telephone company can use to better connect end-users with Internet service providers. In particular, end-users log on, and are provided with an IP address from a pool of addresses that are reused. Each time the user logs on, he gets a different IP address but it comes from the predesignated pool. Benash, however, does not contain any teaching or suggestion of how to make accessible to a network devices that are not TCP/IP capable.

Benash describes generally how to connect to a TCP/IP network, and it mentions that TCP/IP communications messages can be addressed so as to send a packet to a desired

destination. The Benash Patent does not mention a single device that receives messages addressed to any of a predetermined set of different network addresses. In other words, Benash does not meet the plural IP address requirement.

Taking Hsieh and Benash is a whole, for what they would have meant to an artisan of ordinary skill, it does not appear that the requirements of claim 16 could ever be met without further, untaught modifications and enhancements. Since independent claim 16 patentably distinguishes over the combined teachings of Hsieh and Benash, it follows that dependent claim 19 does as well.

Therefore, Applicant respectfully requests the Examiner to withdraw this rejection of claim 19.

Claim 18.

The Examiner rejected claim 18 under 35 U.S.C. § 103(a) as being unpatentable Hsieh in view of Allard and Shaw.

Claim 18 depends from independent claim 16. The deficiencies of Hsieh and Allard vis-à-vis claim 16 have already been set forth above. Applicant now turns to Shaw, to determine whether this document compensates for the deficiencies of Hsieh and Allard.

The Shaw patent describes a device independent format for printing. Under Shaw, an application program designates a printer and issues a print command. The application program thinks that the print command is being executed with respect to the printer. Actually, the print command is responded to by the system by creating a device independent file that will be eventually printed by the printer if it is available. If the printer is not available, the device independent file can be transferred to other printers for printing without intervention by the user.

Shaw does not teach or suggest the plural IP address requirement, and does not compensate for any of the above identified deficiencies of Hsieh, Allard, or Benash. In addition, in Shaw, the printer is a network compatible printer and the printer spool system is based on a client/server type of connection/service. Shaw does not relate to the situation in which a printer or device is network incompatible.

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Even taken for what they would have meant as a whole to an artisan of ordinary skill, the combined teachings of these three references would not have led such a person to have achieved the subject matter of independent claim 16, nor its dependent claim 18.

Therefore, Applicant respectfully requests the Examiner to withdraw this rejection of claim 18.

Claims 21, 22, and 26.

The Examiner rejected claims 21, 22, and 26 under 35 U.S.C. § 103(a) as being unpatentable Hsieh in view of Allard and Shaw. Claims 21 and 26 are independent, and claim 22 depends from claim 21.

Claims 21 and 26, as now amended, each require:

network communications means which have a plurality of IP addresses representing a plurality of locations on the network and which respond to a communications message received from the network and addressed to any one ...

Thus, these claims also include the plural IP address requirement.

As already pointed out above, the combined teachings of Hsieh, Allard, and Shaw do not meet the plural IP address requirement. Therefore, claims 21, 22, and 26 patentably distinguish over these three documents, taken alone or in any combination.

Applicant thus respectfully requests the Examiner to withdraw this rejection of claims 21, 22, and 26.

Claims 23 and 27.

The Examiner rejected claims 23 and 27 under 35 U.S.C. § 103(a) as being unpatentable Hsieh in view of Shaw. Each of these claims is independent, but each has been amended to include a substantially similar requirement for:

relaying means which can connect to other devices, has all the IP addresses assigned to a device group including the network

printer and the devices, and relays communication between the host and the plurality of devices pertaining to the device group, in response to communication which is sent from the host.

Although the plural IP address requirement is phrased differently in these claims, it still patentably distinguishes over the combined teachings of Hsieh and Shaw, for the reasons already made clear above. Therefore Applicant respectfully requests the Examiner to withdraw this rejection of claims 23 and 27.

The new claims patentably distinguish over the prior art.

New claim 86 patentably distinguishes over Hsieh, in view of the following requirements.

network communications means for connecting to an IP-addressed communications network, and for receiving communications messages addressed to any of a predetermined set of different network addresses;

In Hsieh, the router does not include a function for receiving IP-addressed communications messages addressed to any of a predetermined set of different network addresses. The router in Hsieh participates in a network with a variety of local hosts, but Hsieh does not contain any teaching or suggestion that it should respond to any of a predetermined set of different network addresses.

printer selection means for making a selection of one of said one or more connected printers based on the network address in a received one of said communication messages; and

Hsieh does not make a selection of any connected printers, based on any network address.

data transfer means for transferring data from said received one of said communication messages to said selected one of said one or more connected printers over a respective printer interface;

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Hsieh does not transfer any data to any connected printers, and certainly does not do it over a printer interface.

In view of the similarities between claim 86 and the other new independent claims, it is clear that Hsieh does not anticipate or render obvious any of new claims 86-97.

Taking even Hsieh, Allard, Benash, and Shaw is a whole, for what they would have meant to an artisan of ordinary skill, it does not appear that the requirements of claim 86 could ever be met without further, untaught modifications and enhancements.

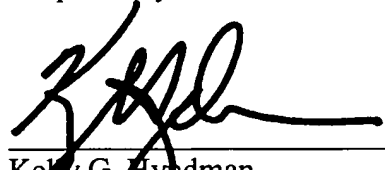
Conclusion and request for telephone interview.

In view of the above, Applicant respectfully requests the Examiner now to find this application to be in condition for allowance with claims 16-23, 25-27, and 86-97. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

Applicant files herewith an Excess Claim Fee Payment Letter with payment for 7 claims in excess of 20, and for 4 additional independent claims.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



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7/25/97

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

16. (Amended) A local router comprising:

network communications means which can connect to a communications network and has a plurality of IP [network] addresses representing a plurality of locations on the network and which responds to a communications message addressed to any of the plurality of IP [network] addresses; and

data transfer means which can transfer the data included in a communications message addressed to any of the plurality of IP [network] addresses to a plurality of destinations and selects destinations of the data according to the IP [network] address of the communication message.

17. (Amended) The local router as defined in Claim 16, wherein the local router can connect itself to one or more network-incompatible devices, and the selected network-incompatible devices are included in the destinations, wherein the one or more network-incompatible devices cannot be directly connected to said communications network.

19. (Amended) The local router as defined in any one of Claims 16 through 18, wherein the network uses a TCP/IP protocol, and the network communications means has [a] said plurality of IP addresses, a plurality of port numbers, or a plurality of identifiers as [the] a plurality of network addresses and responds to a packet which is received from the network and includes any of the plurality of IP addresses, the port numbers, and the identifiers, and wherein the data transfer means selects a destination to which data included in the packet are transferred,

according to the PI address, port number, or identifier of the packet including any of the plurality of IP addresses, the port numbers and the identifiers.

20. (Amended) A local router relaying method comprising:

- a step of responding to a communications message which is received from a communications network and is addressed to any one of a plurality of predetermined IP [network] addresses;
- and
- a step of selecting the destination of data included in the communications message and responds to the network address included in the communications message addressed to any one of the plurality of IP [network] addresses.

21. (Amended) A network printer which can connect to a communications network, comprising:

- network communications means which have a plurality of IP [network] addresses representing a plurality of locations on the network and which respond to a communications message received from the network and addressed to any one of the plurality of network addresses;
- data transfer means which can transfer to a plurality of destinations the data included in the communications message addressed to any one of the plurality of IP [network] addresses and which determines whether to transfer the data to the destination according to the IP [network] address of the communications message;
- print means which processes and prints the data as at least one destination of the plurality of destinations; and
- connection means for connecting the printer to a network-incompatible device as at least one of the plurality of destinations, wherein the network-incompatible device cannot be connected directly to the communications network.

23. (Amended) A network printer which can connect to a communications network and is communicable with a host provided on the network, comprising:

relaying means which can connect to other devices, has all the IP [network] addresses assigned to a device group including the network printer and the devices, and relays communication between the host and the plurality of devices pertaining to the device group, in response to communication which is sent from the host.

25. (Amended) A computer readable program recording medium having recorded thereon a computer program used when a computer executes a local router relaying method, the program comprising:

a step of responding to a communications message which is received from a communications network and is addressed to any one of a plurality of predetermined IP [network] addresses; and

a step of selecting the destination of the data included in the communications message in response to the IP [network] address included in the communications message addressed to any one of the plurality of IP [network] addresses.

26. (Amended) A computer readable program recording medium having recorded thereon a computer program used when a computer implements a network printer which can connect to a communications network, the printer comprising:

network communications means which have a plurality of IP [network] addresses representing a plurality of locations on the network and which responds to a communications message received from the network and addressed to any one of the plurality of IP [network] addresses;

data transfer means which can transfer to a plurality of destinations the data included in the communications message addressed to any one of the plurality of IP [network] addresses

and which determines whether to transfer the data to the destination according to the IP [network] address of the communications message;
print means which processes and prints the data as at least one destination of the plurality of destinations; and
connection means for connecting the printer to a network-incompatible device as at least one of the plurality of destinations, wherein the network-incompatible device cannot be connected directly to the communications network.

27. (Amended) A computer readable program recording medium having recorded thereon a computer program used when a computer implements a network printer which can connect to a communications network and is communicable with a host provided on the network, the printer comprising:

relaying means which can connect to other devices, has all the IP [network] addresses assigned to a device group including the network printer and the devices, and relays communication between the host and the plurality of devices pertaining to the device group, in response to communication which is sent from the host.

Claims 86-97 are added as new claims.